

# The agricultural sector has the most efficient management of state receivables in the Czech Republic

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**Abstract:** The article's objective, which is to identify the causes of the very poor level of management of the administration of these state assets, to present the possibilities of a long-tested experimental model at the Land Fund of the Czech Republic, and to draw attention to this model's potential in its possible implementation in administration of the entire management complex of these state assets in the Czech Republic. The authors first dealt with the theoretical aspects of the given issue, and then prepared an analysis of the original debt collection management "system". This is logically followed by an analysis of the experimental model's efficiency, rounded off with its conclusions. The final chapter contains the results of the research aimed at the current level of knowledge of the examined issue in compressed form, further the outcomes of the research concerned with original unsystematic debt collection management, also results of the implementation of the experimental model, and the assessment of the significance belonging to the results of implementing the experimental model for the entire national economy of the Czech Republic.

**Keywords:** analysis, effectiveness, efficiency, experimental model, recovery ratio, state assets

Management of the administration of selected state assets (hereinafter "MASSA"), in this case overdue receivables, began to gain fundamental national economic importance at the very start of the transformation concerning national economy in Czech Republic. That was because the state was completely unprepared for the failure as for fulfilling obligations by both domestic and foreign legal and natural persons. In the introduction, we must critically point out that in a centrally managed economy this area practically did not exist, given the relationship between state organizations and the state budget and the effectiveness of the state's repressive measures against natural person. State had instruments at its disposal that enabled it to effectively resolve state receivables in an incomparably smaller number and volume.

At the very start of the transformation taking place in a centrally managed economy and moving to a liberal market economy, the lack of preparedness of the state for the progressively growing number and

volume of overdue receivables in all areas manifested itself in a very noticeable way. The greatest increase in the number of debtors, and thereby also volume of receivables, took place during the privatization process. This rapidly emerging critical situation forced the adoption of instant measures in the system of managing the administration of these assets in the National Property Fund of the Czech Republic (hereinafter "NPF CR"). The same was true after a certain time lag, as for the Land Fund of the Czech Republic (hereinafter "LF CR"). Likewise, the management of the process of recovery of underpayments on taxes, customs duties and similar payments was quite inefficient, because neither the legal environment nor the state institutions complying with completely new conditions of a liberal market economy had been created.

In the introduction to this article, the authors raise the question: Why is MASSA so inefficient throughout the entire national economy? Why is this issue basi-

cally not addressed in literary sources, particularly in renowned journals?

The aim of this article is to identify the causes of the very poor level of MASSA, to illuminate the possibilities of a long-term verified experimental model applied in possible implementation in the entire state administration, and last but not least to test the practical applicability of systematic and situational management theory, as well as the economic theories of fiscal policy, government failure, asymmetrical information and moral hazard.

## RESEARCH, DEVELOPMENT AND IMPLEMENTATION OF THE EXPERIMENTAL MODEL IN THE LAND FUND OF THE CZECH REPUBLIC

Compared to NPF CR, the results of LF CR in this area have been evidently unsatisfactory, as a consequence of the process consisting in the research, development and implementation of the experimental MASSA model having been proposed:

- (1) Analysis of the original MASSA practice in LF CR.
- (2) Development of the experimental MASSA model.
- (3) Practical implementation of the experimental MASSA model in the management system of LF CR.

### Theoretical starting points

Before commencing the development of the experimental model, theoretical starting points were prepared, on the basis which the experiment's original concept had been created on. After analysing the implementation, expert literary sources were examined with the aim of finding the texts dealing with this fiscal policy segment.

*Systematic management theory* comprises findings representing general principles for designing effective management processes, both during the selection of national economic strategy and during its realization under constantly changing conditions (Bertalanffy 1975). Systematic management theory brought managers' broader options of interpreting national economic decisions (McNamara 2015).

*Situational management theory* works with the concept of an operational framework in which the findings of individual management theories are compressed (Hollander 1978). The situational framework is being continuously and dynamically developed with changing input variables into the system. Hersey

(1985) states that not a one "best" management style exists. The most successful leaders are those who adapt their management style to the abilities and willingness of the individuals or group which they are trying to manage. Situational management theory is based on two fundamental elements: the management style, and the level of performance preparedness of the individual or group (Blanchard et al. 1985).

*Theory of fiscal policy.* Public resources are limited, and the given governmental restrictions often need to weigh the benefits brought about by the expenditure on the one hand against benefits from saved resources on the other. According to the World Bank, the design of fiscal policy should strive to ensure macroeconomic stability, as well as support the country's growth and long-term prosperity. The impact of growth on the composition of public expenditure is an important aspect when designing a fiscal policy which is subsequently the subject of research interests (Semmler et al. 2011).

*Theory of government failure.* Government failure is the realization of an inadequate economic policy, which destroys the market economy's self-regulating mechanism. The main cause of government failure is usually rent-seeking, resulting in excessive costs and an increasing public budget. The concept of government failure only came into existence only in modern economic thinking – in institutional economics and in the public choice theory. Government failure usually induces increased costs for all members of society, while bringing benefits to some persons (Stiglitz 1983). Stiglitz (1991) defines three groups of causes of government failure: imperfection arising from the nature of the political process (rational ignorance, composition of government, vote trading), influencing of public elections (interest groups, rent-seeking) and limited control. Dolfisma (2011) states that government failure will be observed in the context of governmental change, adding or removing rules which may bring additional costs to some, or even all members of society, while benefit others.

*Theory of asymmetrical information.* Imperfect, false or incorrect information, on the basis of which the government passes its decisions, is asymmetrical information, which, as a result, determines government failure with all its consequences (Akerlof 1970). Asymmetrical information for government decision-making is created either by poor professionalism, or deliberately for the purpose of rent-seeking (Sandmo 1999). Bureaucrats have access to more politically relevant information than politicians (Meier et al.

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1999). The problem of asymmetrical information causes an increase in transaction costs, and leads to incorrect decisions and inefficient results.

*Theory of moral hazard.* The state's moral hazard usually arises as a consequence of erroneously passed government decisions (i.e. government failure), as a government being responsible for its citizens' interests knowingly or unknowingly prioritizes its own interests or those of its interest groups or voters (Stiglitz 1983). The consequences then manifest themselves in increased state budget costs, emergence of crises, inequality in front of law etc. (Dowd 2009). Pauly (1968) states that whenever uncertainty is present in economic activity, it must be eliminated with surety, which, of course, is not possible in national economic decision-making and certainly not in fiscal policy. Moral hazard is an example of economic interaction which includes imperfect observability. The result is a breach of the effective relationships among subjects involved in the provision of information, passing of decisions and their realization (Rubinstein and Yaari 1983).

Severová et al. (2012) states that agricultural subsidies are a highly topical economic policy problem in the Czech Republic. They deal with the behaviour of average and marginal costs forming the curves in the short-term and long-term horizons, the influence of subsidies on prices, and the loss of subsidies' effectiveness due to their surplus. The solution of this fundamental issue is absent here, being as well as the recovery of state receivables from provided subsidies when subsidy rules are breached. Those are important segment of managing the administration of state receivables.

The idea that the United States of America can be managed as a company is basically silly, but at least one of Ross Perot's objective views makes sense. One of the first things that management looks at when taking over a company in terms of structure, volume and creditworthiness of receivables. Perot was right when he said that there is money here which can be obtained by better recovery management of tax receivables (Anderson 1992).

The National Association of Credit Management created a Government Receivable Department, which will provide a forum for people and companies interested in creditor practice. In the past, the association dealt with federal government receivables, but in the future the department's goal will be to focus its attention on state and local government, and the associated financing (Anderson 1992).

## Analysis of initial MASSA practice in LF CR

The research has led to the following conclusions:

- (1) *Limited competency of the highest level of management – the statutory organ of LF CR.* This limitation was caused by poor professionalism in the area of basic principles of management, economics and law, but most importantly by an inability to apply their dynamic syntheses in practice. Another limit was insufficient motivation to resolve this complex and socially ungrateful issue, because priority was given to the sale of property. This gave rise to a positive social response from acquirers towards LF CR workers at all management levels, in contrast to the repressive measures in the administration of overdue receivables which, on the contrary, quite logically give rise to a very negative social response to the creditor's representatives.
- (2) *Failure to comply with basic management principles.*
  - Inadequacy of the Organizational Code, Signature Code, organizational structure, methodology etc., with the view to a failure to define the powers and responsibilities of individual managers and departments.
  - Unclear definition of powers, responsibilities and seniority and subordination relationships.
- (3) *Inadequacy of internal regulations relating to the Organizational Code and organizational structure.* Inadequacy of other internal organizational, methodological and implementing regulations relating to the Organizational Code and organizational structure, including insufficiently defined job descriptions for individual workers.
- (4) *Absence of systematic MASSA.*
  - Absence of analytical phase.
  - Passing of erroneous decisions on the basis of the absence of a complete debtor analysis, i.e. on the basis of asymmetrical information.
  - Absence of records and evaluation of the development as for basic indicators: "recovery ratio", "effectiveness", overall volume of receivables, volume of receivables arising in individual years, involving the volume of receivables settled in individual years, overall number of receivables, number of receivables arising in individual years, involving of receivables settled in individual years, etc.
  - Time interval between the date of origin of the overdue receivable and commencement of the realization of measures.
  - Interest-differentiated approach to debtors.

- (5) *Excessive delegation of powers and a high level of freedom in RD decision-making, without feedback from headquarters.* Although RDs benefited from an excessive delegation of powers and had a high level of freedom in decision-making, they progressed very benevolently and inconsistently. This radically reduced the efficiency of MASSA. It was discovered that a negative role at this level of recovery play by personal relationships between workers and debtors, because many RD workers could not properly uphold the rights of a creditor against debtors with whom they had established long-term social bonds.
- (6) *Excessively high level of freedom for mandataries without control feedback from headquarters.* This was negatively reflected in both the decision-making and implementation phase. Lawyers quite logically chose proposed solutions which were simplest for them in terms of work, and most advantageous in terms of remuneration.
- (7) *Insufficient quality of human resources.* First and foremost, the MASSA issue requires exceptional managerial and organizational abilities with regard to the synthesis of very good knowledge of economics and law. Finding workers thus equipped for the RDs, from the highest management levels to clerks, was not realistic, which quite logically determined the formation of a special team.
- (8) *Inadequacy of the information system.* RD workers did not operate the information system correctly. Some debtors were not recorded in the database at all, while others had an erroneously entered debt amount, due payment dates etc.
- (9) *Unsuitable structure of mandataries supplying work during debt recovery.* Mandataries' provided legal services, and a sort of "extrajudicial debt recovery". Mandataries were completely absent in the areas of auditors, economic experts, experts in the field of economics and the assessment of businesses; likewise, mandataries holding a licence to organize public auctions and having experience in the realization of public and commercial tender procedures were also absent.

### Experimental MASSA model

A completely new MASSA system was prepared on the basis of the results of earlier practice. The experimental model was adhered to from the date of its implementation in the year 2001 to the year 2007/2008, when personnel changes took place and

the implemented model was disrupted by the influence of interest groups due to their rent-seeking. This subsequently distorted the results achieved by the experimental model.

### Updating of internal regulations

It was necessary to create new, or to fundamentally update existing regulations and documents defining the new MASSA system, in the order set forth below, according to the legal force of their effectiveness:

#### (1) Organizational Code

Internal norm of supreme legal force must be the first to be updated. This implies that the basic objective was a fundamental restriction of delegated powers and the excessive level of freedom for RDs and, on the contrary, concentration of the maximum powers and responsibilities in a single element of the management system, i.e. the SD, which in terms of the human resource professionalism was correspondingly equipped. Powers and responsibilities at all management levels, both for individual departments and for all workers, have been clearly defined.

#### (2) Signature Code

The Signature Code was brought into compliance with the Organizational Code in terms of the authorization to sign documents at all management levels.

#### (3) MASSA methodology

– Characteristic of the analytical phase in the new methodology:

*RDs.* A strict obligation on RDs to perform, within their capabilities, an initial debt analysis and settle the debt, no later than the start of the month following the month in which the overdue receivable arose. If the receivable was not paid, then the RD was obliged to pass the entire file on, to the SD headquarters, within sixty days.

*Headquarters.* The SD prepared a debtor analysis according to the following criteria: the receivable amount, the legal regime in which the receivable arose, available information about the debtor's solvency, and the debtor's approach to resolving their obligation.

For large-scale receivables, which were not properly secured with legal instruments, a mandatary was hired – an institute of experts in the field of economics, accounting and valuation, which prepared a very detailed "structured property, accounting and financial debtor analysis". That was crucial for evaluating all legal regimes allowed by applicable law.

– Characteristic of the decision-making phase in the new methodology:

*RDs.* RDs were basically deprived of decision-making powers so that former shortcomings could be eliminated. In particular: different decisions in legally identical cases in various RDs, a benevolent approach to certain debtors, different decisions in the same matter in the RD and in the headquarters, realization of legally erroneous acts, etc.

*Headquarters.* The statutory organ delegated most of the powers and responsibilities to the head of the SD, which achieved the acceleration of not only the decision-making phase, but the entire administration process. The statutory organ retained only the most complex cases within its management powers.

– Characteristic of the realization phase in the new methodology:

*RDs.* The RD merely delivered payment demands to debtors, conducted initial talks with them about the settlement of the receivable after it arose, received seized property, kept records of property and operated the information system.

*Headquarters.* The entire realization phase was transferred to the competence of the SD, which realized decisions via its workers or mandataries, or in some cases regional departments. It had power over the entire control of the realization phase, just like the operation of the information system.

The new methodology also contained new sample binding documents which could not be circumvented: purchase contracts, lease contracts, contracts of mandate, lien contracts, payment demands for sums owed, debtor declarations, draft notarial records with direct executability, promissory notes etc.

#### (4) Information system

The environment of information system was modified in such a way that compatibility with all of the afore-mentioned regulations and documents were ensured, and so it were not possible to operate it incorrectly.

### Analysis of the efficiency of the experimental MASSA model

Figure 1 characterizes two basic parameters in the area of MASSA, existing receivables before their due payment date and overdue receivables. The total receivables represent the volume of all the remaining receivables of LF CR, which is formed by the difference between the cumulative sum of all recorded receivables, and the volume of receivables already settled. Receivables before their due payment date are receivables for which the due payment date has

not yet expired, i.e. the obligation to pay the debt has not yet arisen for the acquirer. Overdue receivables are receivables for which the due payment date has unnecessarily expired, i.e. the acquirer failed to comply with their obligation arising from the purchase contract, and on the day following the unnecessary expiration of the due payment date they became a debtor. In essence, the development of receivables before their due payment date represents the development of the property volume of the property sold (Zeman 2016).

The course of the curve in question evidently shows an initial unstable development and then a dramatic growth in the number of receivables before their due payment date. On the contrary, the development of overdue receivables from the beginning of LF CR's existence to the year 2000 has a slightly decreasing trend, regardless of the development of the property volume sold, or more precisely receivables before their due payment date. Although there was a significant decrease in sales in the year 1998, overdue receivables still rose slightly.

The application of the experimental MASSA model in the year 2001 is quite apparent. A dramatic fall in overdue receivables during the year 2001 and the quite stable minimum level until the year 2006 confirms the correctness of the newly applied model.

Table 1 characterizes the overall development of the structure of the volume of LF CR's receivables, i.e. cumulative receivables both before and after their due payment dates. In Table 1, one may graphically compare the developmental trends of individual types of receivables.

It is obvious from Table 2 that, in terms of the structure of receivables, the largest part of volume is represented by receivables from the privatization

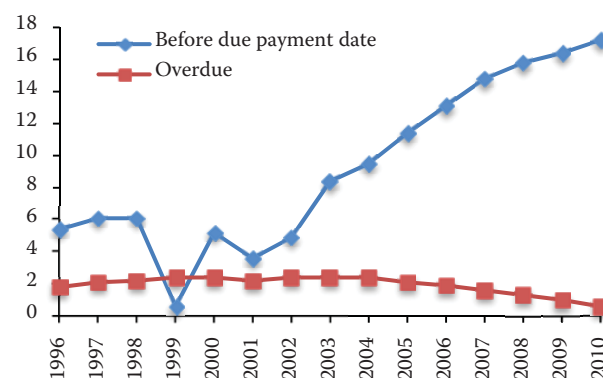


Figure 1. Development of the volume of receivables of the Land Authority of the Czech Republic (in billions of CZK)

process. It's apparent that LF CR did not adequately capture the initial onset of debtors, which resulted in the relatively steep growth in the volume of receivables to 2 billion CZK in the year 2000. Even here the application of the experimental model is pertinent, because its efficiency manifested itself immediately in the year 2001. The most significant of the other receivables was the rent from leased property, where tenants' payment ethics were very poor. In this item, the effectiveness of the experimental model only manifested itself in the year 2003, after which the volume of receivables decreased evenly.

Figure 2 provides an overview of the structure of the methods used to resolve receivables recorded in CZK. Unfortunately, the largest share (34%) is linked with the method with the lowest recovery ratio, i.e. bankruptcy-insolvency proceedings. This share is caused by the fact that the most valuable property was privatized during the initial period, leading to an emergence of debtors with a high volume of receivables, especially in the years 1991–1999. Unfortunately, LF CR's inadequate actions could not be rectified in any way in later years, and the only legal method which could be employed was bankruptcy-insolvency proceedings.

The second largest share appertains to an extrajudicial method, which is the transfer of receivables. This

method is relatively effective, not very administratively demanding and is employed soon after the receivable arises; its effectiveness is increased by savings on transaction costs, which would subsequently be incurred during any recovery method.

Third place is occupied by other extrajudicial methods, such as the postponement of due payment dates by closing the repayment calendar under the condition of strengthening the legal position of LF CR, or higher securing with more valuable property. These methods proved themselves to be very good. Although the transaction costs of the resolution are higher in the initial phase, they are one-time costs, and together with the judicial methods they form quite a negligible portion, expressed in thousand or, at most, units of percentage points.

Fourth place forms withdrawal from the purchase contracts, with the subsequent seizure of the assets which were the subject of the transfer in question. This is absolutely the most efficient method, where the recovery ratio fluctuates around 100%, but its timely employment, with a maximum deadline of months after the signing of the contract for the transfer, is crucial. Unfortunately, we must point out that this method was not practised at all in LF CR in the initial years. If it were otherwise, such a large volume of overdue receivables, subsequently ended in

Table 1. Development of the structure of the volume of receivables of the Land Authority of the Czech Republic (in thousands of CZK)

Year	Receivables from privatization	Receivables from the sale of state-owned agricultural land	Receivables from rent	Receivables from the repayment of loans	Other receivables	Receivables from the sale of land as per Act No. 229/91 Coll.	Receivables from the exchange of land
1996	6 531 254	0	346 183	301 871	9 098	0	3 283
1997	7 519 796	0	337 110	250 505	9 509	39 370	345
1998	7 762 299	0	247 863	222 122	9 526	11 908	0
1999	7 543 597	0	260 023	202 285	10 599	5 334	0
2000	7 190 042	11 334	236 438	180 211	10 182	4 670	128
2001	5 351 695	74 498	227 196	164 545	10 103	4 247	128
2002	5 080 279	1 806 969	309 164	157 252	10 058	34 905	128
2003	4 882 490	5 392 738	253 614	151 536	9 952	2 814	128
2004	4 668 587	6 859 157	236 316	127 263	9 472	3 666	128
2005	4 335 531	8 781 143	225 688	109 765	9 440	1 606	128
2006	3 997 568	10 764 583	177 906	87 278	9 729	–1 804	128
2007	3 653 078	12 479 967	132 628	56 704	15 037	–412	128
2008	3 248 753	13 685 527	100 790	47 417	14 265	3 666	128
2009	2 637 662	14 556 057	92 823	39 548	15 672	3 666	128
2010	2 228 117	15 358 691	108 967	28 264	25 578	3 666	128

Source: Own sources of the Land Authority of the Czech Republic (1996–2010)

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Table 2. Development of the structure of the volume of overdue receivables of the Land Authority of the Czech Republic (in thousands of CZK)

Year	Receivables from privatization	Receivables from rent	Receivables from the repayment of loans	Receivables from the sale of state-owned agricultural land	Other receivables	Receivables from the sale of land as per Act No. 229/91 Coll.	Receivables from the exchange of land
1996	1 248 711	346 183	186 271	0	9 098	0	3 283
1997	1 548 058	337 110	149 295	0	9 509	39 370	345
1998	1 775 146	247 863	113 490	0	9 526	11 908	0
1999	1 983 001	260 023	146 484	0	10 599	5 334	0
2000	1 983 859	236 438	153 975	0	10 182	4 670	128
2001	1 798 560	227 196	153 338	0	10 103	4 247	128
2002	1 902 087	309 164	149 393	0	10 058	34 905	128
2003	1 930 281	253 614	146 361	2 975	9 952	2 814	128
2004	1 942 104	236 316	124 401	53 959	9 472	3 666	128
2005	1 713 694	225 688	107 483	19 883	9 440	1 606	128
2006	1 639 003	177 906	86 078	25 538	9 729	–1 804	128
2007	1 372 537	132 628	56 104	9 545	15 037	–412	128
2008	1 144 386	100 790	47 417	10 616	14 265	3 666	128
2009	841 130	92 823	39 548	15 476	15 672	3 666	128
2010	405 976	108 967	28 264	15 460	25 578	3 666	128

Source: Own sources of the Land Authority of the Czech Republic (1996–2010)

bankruptcy-insolvency proceedings with the absolutely lowest recovery ratio, would not have arisen.

The “resolved in a different manner” method includes all newly-concluded appendices to purchase contracts, which removed various shortcomings or errors on the seller’s part, and in some cases also incorrectly calculated or incorrectly recorded, and therefore illegitimately demanded, overdue receivables.

The final method is debt recovery by filing petitions in the most expanded case, with a proposed decision for the payment of the purchase price, rent etc. This is a very lengthy method, with high transaction costs and a low recovery ratio. Despite its efficiency, this method should be applied as little as possible.

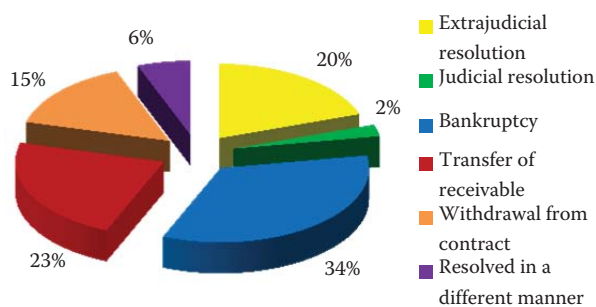


Figure 2. Structure of methods used to resolve the receivables of the Land Authority of the Czech Republic overall (in %)

### Results achieved by the application of the experimental MASSA model

At the outset of this chapter, we must state that the newly established model of debt recovery, applied after the year 2000 immediately manifested itself in virtually all the monitored parameters, although it was not expected that such noticeable results would be achieved immediately after its application. Instead, it was expected that the inertia of the previous system would cause greater difficulties as for achieving better results. Through more detailed examination, it was discovered that the experimental model very flexibly determined improvement of the results in the monitored parameters, such as recovery ratio, efficiency and development of volume and number of overdue receivables (Zeman 2015).

### Development of the recovery ratio of overdue receivables

Within the scope of implementation of the experimental MASSA model in LF CR, the manner, and most importantly structure, of the monitored parameters also changed. Before then, the recovery ratio parameter had not been recorded, or even regularly analysed. For this reason, there are shorter time-frames for certain parameters – only since the year 2001.

It's evident from Figure 3 that in the initial years 1997–2000, the average recovery ratio in the monitored period was approximately 50%. At the end of the year 2001, i.e. in the first year of implementation of the experimental model, the recovery ratio was approximately 120%. Here, we must emphasize that such a recovery ratio could not be achieved repeatedly, because intensive withdrawing from purchase contracts simultaneously led to the forfeiture of deposits, contractual fines etc. The state acquired the assets back at their nominal value, together with forfeited deposits, auction sureties, appurtenances etc., which is why the recovery ratio was higher than 100%.

This positive result was achieved mainly by extrajudicial methods, in which changes could be realized immediately, unlike in judicial proceedings, i.e. bankruptcy proceedings and classic judicial proceedings on the basis of a petition, where influence in terms of the speed of the progress and the achievement of results is very limited by the general legislation of the Code of Civil Procedure, to which the appropriate court officials very often refer, stating that courts are independent and must not be subject to unlawful pressure.

Recovery ratio values higher than 100% have been achieved due to the fact that, in many cases, not only was the nominal value settled, but also a significant part of the appurtenances, “forfeited deposits paid to fund accounts before the signing of purchase contracts” etc.

While evaluating the first year of the application of the new model, the statistical monitoring showed certain indications which pointed to the need to

commence an even more detailed monitoring of certain parameters, especially the recovery ratio in individual legal regimes, so that the positive results of the newly-established model could be demonstrated. In the case of the overall, or alternatively cumulative, monitoring of the recovery ratio for all legal regimes, achieved results were significantly deformed by the recovery ratio of judicial methods, especially bankruptcy-insolvency proceedings.

The extrajudicial method recovery ratio peaked in the year 2002, when it reached approximately 135%, which was absolutely the highest value for the entire monitored period. In following years, a slight degression alternates with a tiny progression. The degression was caused by the fact that, at the start of the experimental model's application, all reserves in the area of extrajudicial resolutions were removed. Personal negotiations were carried out with all debtors about the extrajudicial resolution of disputes provided they accepted the conditions stipulated by LF CR, being for example a considerable improvement in the state's legal position, and securing of receivables with real estate, securities etc.. An immediate payment of the receivable's nominal value could lead to the reduction, or even waiving, of interest on delayed payment etc. As time went on, there were fewer and fewer simple cases and more and more complex cases remained, the resolution of which required higher transaction costs and a longer time interval. Because this simultaneously approached cases where the contractual parties in question had an abundance of time to dispose of the acquired property, the recovery efficiency was lower and lower.

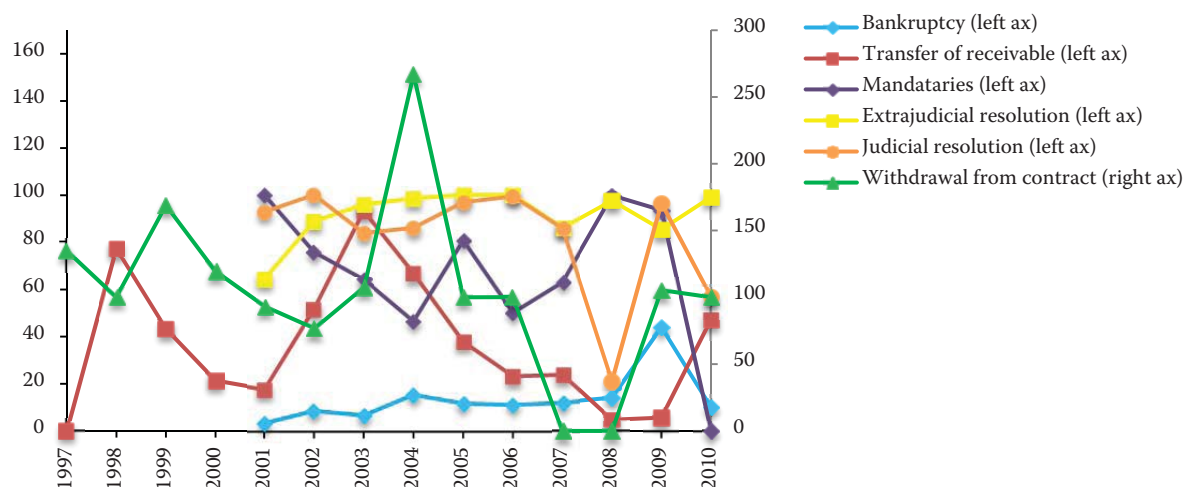


Figure 3. Development of the recovery ratio of the receivables of the Land Authority of the Czech Republic in individual legal regimes (in %)

A very important fact is that, from the second year of implementation of the experimental model, over 80% of the receivables arising in the monitored period were completely settled and concluded in the same period. The positive results were formed predominantly by newly arising receivables, while outdated receivables influenced the achieved results in a negative manner.

Judicial methods in the year 2002 showed a recovery ratio of approximately 29%, which was maintained until the year 2004, when the recovery ratio decreased significantly to approximately 4%. This dramatic deterioration was caused mainly by the conclusion of most of the bankruptcy proceedings, in which the recovery ratio for the entire monitored period is the lowest of all realized methods of settling receivables.

Worthy of mention is also the introduction of mandatories into extrajudicial recovery. They immediately, after an overdue receivable arose, contacted the debtor in their place of business and commenced an extrajudicial settlement with them. This method proved to be extraordinarily successful, with regard to the fact that its average recovery ratio in the years 2001–2006 was approximately 70%.

A question emerges itself at the end of this chapter: What did the newly monitored parameter, i.e. recovery ratio, actually demonstrate? An analysis of the recovery ratio very clearly confirms that, in the administration of such state assets, utilizing extrajudicial methods is incomparably more efficient than using judicial methods. Here, another question offers itself: In what does the extrajudicial methods' far higher efficiency lie? In terms of time demands, extrajudicial methods are incomparable with judicial methods, because they are realized in a time period of at most a few months at most – usually within three months from the date of commencement of the settlement. The higher recovery ratio is achieved mainly by the fact that the state's counterparty does not get sufficient time to dispose of the property in question in a dishonest manner and thereby prevent the state from taking the property back, or otherwise efficiently settling the receivable. Transaction costs incurred during the settlement of the receivable are merely one-time costs, so, in comparison with the costs of any judicial proceedings (i.e. all types of petitions, or bankruptcy and criminal proceedings), and of the state's legal representation, they are negligible. Another reason for the extrajudicial methods' higher recovery ratio is the actual manner of dividing receivables among individual settlement

methods. The simpler cases, where the debtor's ability to pay was not seriously disrupted, were logically included in the extrajudicial method regime. In the event that the employment of extrajudicial methods did not achieve the required efficiency, "harsher" methods were used, i.e. petitions, submission of proposals for bankruptcy-insolvency, or the use of criminal law resources.

### ***Development of the effectiveness of overdue debt recovery***

Within the scope of the introduction of the experimental debt recovery model in LF CR, the manner, and most importantly structure, of the monitored parameters also changed. Before then, the effectiveness parameter had not been recorded, or even regularly analysed. For this reason, there are shorter time-frames for certain parameters – only since the year 2001.

Average effectiveness for the period 1996–2000 was approximately 32%, which means that out of every 100 overdue receivables which arose, only 32 were resolved. In contrast, as early as the year 2001, the introduction of the experimental model manifested itself in an increase in effectiveness to approximately 81%.

The average effectiveness value during the period of application of the experimental model, i.e. 2001–2006, was approximately 97%, while towards the end of the year 2006 it reached a value of approximately 108%. At first sight the ascertained value seems incorrect, because it exceeds the boundary of one hundred percent, but here we must mention that, even in this period, not all of the receivables which arose in the given year were ever settled. As the turning point the year 2005 must be regarded. At this time, the boundary of 100% was exceeded for the first time, which means that that year, for the first time in the entire existence of LF CR, the value of the number of receivables settled in the monitored period exceeded the value of the number of newly arising receivables. From the developmental trend of effectiveness, we can conclude that the implementation of the experimental model and its efficiency requires a time interval of several years, before the model begins to operate across its entire scope and intensity of its capabilities.

Furthermore, it was discovered that effectiveness was most affected by an emphasis on the immediate commencement of the recovery process and an accentuation of extrajudicial resolution methods, which demonstrated significantly better results than judicial methods.

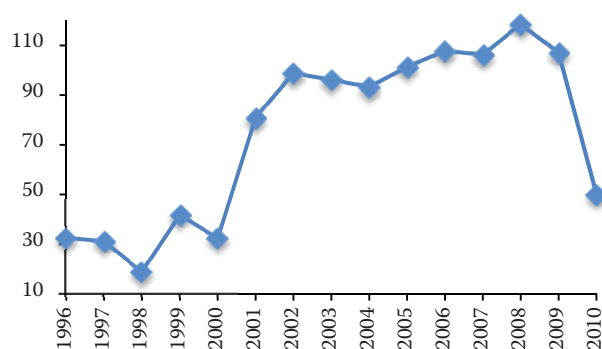


Figure 4. Development of the effectiveness of recovery of overdue debts for the Land Authority of the Czech Republic overall (in %)

Unfortunately, the effectiveness parameter could not be analysed according to individual recovery methods, as the recovery ratio was evaluated, because the historically-established data monitoring method did not allow it. Of course, an evaluation of effectiveness according to individual methods would subsequently enable an analysis of the development of correlation between effectiveness and recovery ratio. Due to the afore-mentioned reasons, the development of effectiveness was analysed for all the methods together. Even despite this methodological handicap, Figure 4 has sufficient informational capability about the efficiency of the newly implemented model.

### Conclusions of the analysis

More detailed research showed that the experimental model very flexibly provided an improvement of the results in the monitored parameters, such as recovery ratio, effectiveness, and development of the volume and number of overdue receivables, which is documented by the synthetic Figures 5 and 6.

Figure 5 characterizes the relationships between the basic monitored parameters. Curve No. 1 shows a very positive trend, when the occurrence of overdue receivables decreased considerably, although the overall volume of receivables before their due payment date increased. Curve No. 2 shows the same in the developmental trend of the number of arising receivables, although the number of active contracts had an upward trend. On the contrary, curve No. 3 demonstrates the experimental model's efficiency, because the proportion of settled receivables compared to receivables arising in the monitored period increases very progressively until the year 2008. Likewise, the upward trend of curve No. 4 demonstrates the model's efficiency, because the ratio of the number of newly arising receivables in the monitored period to the number of those settled is getting nearer one another, or more precisely has a positive upward trend for the entire monitored period, whereby in the year 2010 it reaches a value of over 90%.

To conclude the comments about Figure 5, we should explain the difference between the exam-

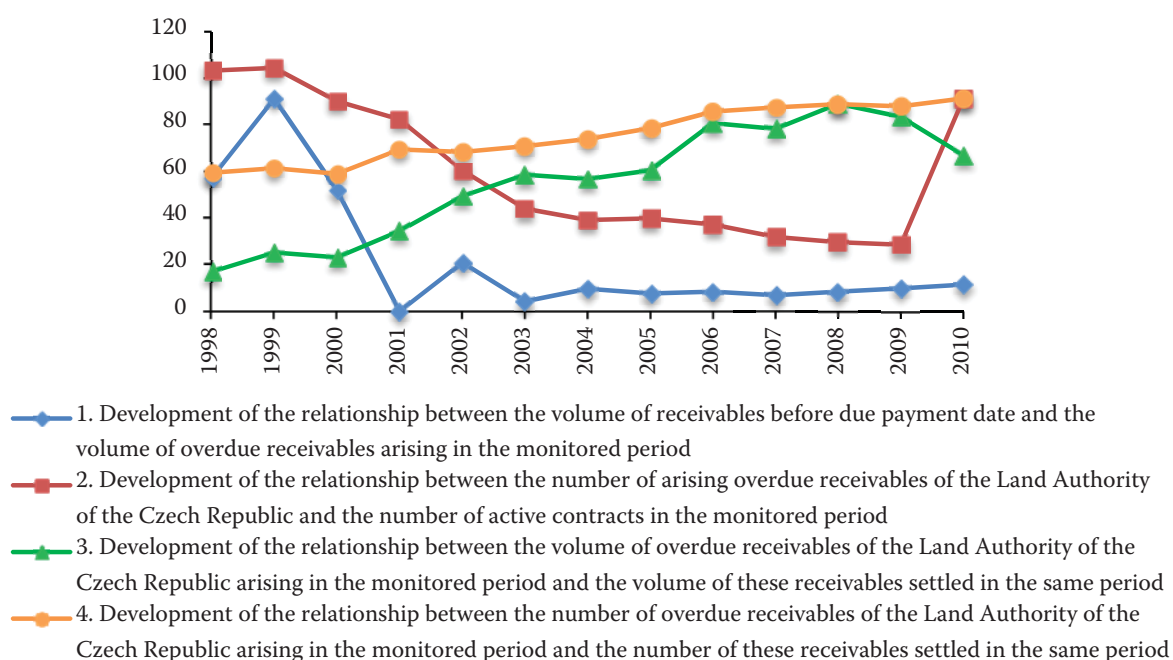


Figure 5. Characteristic of the relationship between the basic monitored parameters (in %)

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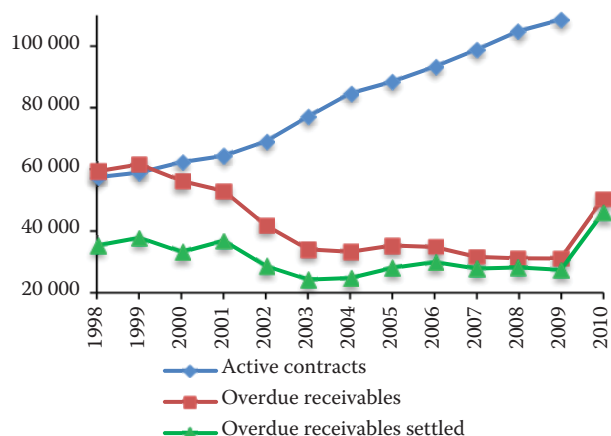


Figure 6. Development of the number of active contracts, number of overdue receivables and number of overdue receivables settled in the same period

ined parameter in Figure 4, i.e. development of the effectiveness of debt recovery, and curve no. 4 in Figure 5, i.e. development of the ratio of LF CR's overdue receivables arising in the monitored period to the number of these receivables settled in the same period, because it could lead to confusion on the reader's part or give the impression that the parameter is one and the same. The difference lies in the fact that the development of effectiveness in Figure 4 is the number of receivables arising in the given year to the number of receivables settled in the given year, while curve No. 4 in Figure 5 represents the number of receivables arising in the monitored period and the number of these receivables which were settled.

Figure 6 demonstrates the effectiveness of the implemented model, because the number of active contracts in the monitored period rises progressively; on the contrary, the development of the number of overdue receivables has a decreasing character, and the development of the number of settled overdue receivables is constantly getting nearer to the developmental trend of arising receivables. This is a proof of the speed and efficiency of the model, which does not allow arising receivables to become outdated and thereby to proportionally decrease their recovery ratio.

## CONCLUSION

### (1) Results of research of the current level of knowledge of the examined issue

Research of renowned scientific impact magazines led to a very surprising conclusion – that no contribution was found in the renowned magazines which

deals with MASSA, whether on a purely theoretical or a practical research level. The authors see the reason for this in the fact that it involves an extraordinarily complex, specialized issues, where three fundamental domains intertwine on both a theoretical and a practical levels: management, economics and law. In practice, it also involves very dynamic systems with continuously changing input variables, which, as a result, requires the knowledge of all three of these domains, as well as a creative and very flexible approach, because the situational framework in which the addressed issue finds itself is continuously and dynamically changing, depending on changes in the variables entering the system. An extraordinary demand on human resources for this activity logically follows from the afore-mentioned conclusions, because the basic skills, particularly those of managers, must include knowledge of management, economics and law, also an ability to plastically synthesize these domains, and subsequently make very diverse decisions, because individual cases cannot be unified, and therefore a uniform template cannot be used for them.

### (2) Results of research of the original unsystematic MASSA

The research showed that the basic determining shortcomings were defects in the originally established practice which, in terms of a failure to comply with basic management principles, cannot be called a system. The decentralization of management to the lowest, i.e., district level, for such an extraordinarily complex issue, without feedback from the SD, statutory organ or the headquarters in general, proved to be inappropriate. With such excessive decentralization, ensuring a unified approach to resolving identical cases throughout the entire territory of the republic is not realistic, blanket influence by interest groups cannot be excluded, and an adequate quality of human resources for this extraordinarily demanding synthetic issue cannot certainly be guaranteed.

### (3) Characteristic of the experimental MASSA model

A fundamental priority which emerged from the research was the area of systematic and situational management theory, while economic and legal issues were identified as secondary. That is why the entire MASSA system will be prepared anew, in its entire scope and depth. The experimental model was marked by a concentration of powers and responsibilities in an SD equipped with quality human resources. Given

the quality of human resources, local social bonds etc., RDs operated merely as a “service” for headquarters for fulfilling sub-tasks and keeping records and databases. In general, we must state that this issue cannot be efficiently dealt with in a decentralized manner, as was the case in LF CR and as is still the case in financial authorities, customs administration, social security administration etc. This philosophy is conclusively demonstrated by the results of the implementation of the experimental MASSA model.

From the results of long-term research, we can draw reliable conclusions, which demonstrated the efficiency and effectiveness of the functioning of the experimental model, which could be employed as a system throughout the entire republic. The statistical conclusiveness of the experimental model is documented by the sizes of the statistical files, on the basis of which the efficiency, functionality and effectiveness of the implemented model was verified. During the monitored and examined period, LF CR (LF CR 1994–2010):

- concluded 969 658 contracts, out of which an average of 80 805 was active every year;
- recorded a total of 554 056 overdue receivables in the monitored and examined period, out of which an average of 42 620 arose every year;
- settled 408 365 overdue receivables in the monitored and examined period, out of which an average of 31 413 was settled every year.

#### (4) Results of the implementation of the experimental MASSA model

*Development of the number of receivables.* On 31/12/2000, the number of active contracts was approximately 62 500, while in the year 2009 their number had grown to almost 109 000, which stands for a growth index of 75%. A growth in the number of active contracts is usually accompanied by a growth in the number and volume of arising receivables. The effectiveness of this system is documented by Figure 6, where the number of receivables on 31/12/2000 was approximately 56 300, while in the year 2003 their number decreased to approximately 34 000 and basically stayed at the same level until the year 2009. From the date of implementation of the experimental model, the developments of arising and settled overdue receivables became nearer to one another and the trends copied themselves. In the year 2000, the share of arising receivables per number of active contracts was 90%, while in the year 2009 this share was only 29%. While in the year 2000 the share of

settled receivables in the total number of arising receivables represented 59%, in the year 2009 this share increased to 88%. The degressive development after the year 2008 was caused by personnel changes in LF CR, which led to a failure to comply with the experimental model.

*Development of the volume of receivables.* In the year 2000, the volume of receivables before their due payment date represented 5.2 billion CZK, while in the year 2010 it reached 17.2 billion CZK, which is a growth index of 330%. The volume of overdue receivables in the year 2000 was 2.4 billion CZK, while in the year 2010 it fell to under 600 thousand CZK, which is a decrease index of 400%.

*Development of recovery ratio.* In the year 1999, the average recovery ratio in the monitored period was 28%, while at the end of the year 2001, i.e. the first year of the implementation, the recovery ratio was approximately 120%. The experimental model fundamentally influenced all the extrajudicial methods. The experiment had no impact on judicial methods, which were outdated cases for which judicial proceedings had been going on for years. The extrajudicial methods reached their peak recovery ratio in the year 2002, with a record result of 135%.

*Development of effectiveness.* On 31/12/2000 effectiveness was 32%, in the year 2002 it was and in the year 2008 it reached 119%. The degressive development after the year 2008 was caused by personnel changes in LF CR, which led to a failure to comply with the experimental model. No other comments are needed in relation to the conclusiveness of the experimental model's efficiency.

The implementation of the experimental MASSA model demonstrated that, during the recovery of state receivables, the recovery ratio can be increased by over 50%. The efficiency of the effectiveness of debt recovery increased by over 70%.

#### (5) Significance of the results of implementation of the experimental MASSA model for the entire national economy of the Czech Republic

The aim of the implementation of the experimental model of managing the process of recovery of state receivables was to verify the efficiency of this model on a sample state institution, in this case LF CR, which has an identical territorial arrangement as other state institutions which administer these types of state assets. These are, for example, financial authorities, customs administration, social security administration, the authority which represents the state in property matters etc. This experiment and

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research demonstrated the manner in which these state assets can be most efficiently administered, uniformly, in all state institutions. From a national economic perspective, the MASSA issue is an extraordinarily important area, given the fact that the volume of state receivables from tax, customs and social underpayments in the year 2013 was approximately 225 billion CZK. This is not a inconsiderable sum in relation to the income side of the state budget. However, until now, the state has not dealt with this issue systematically at all. This fact is a classic example of the value of the theories of government failure, moral hazard, asymmetrical information etc.

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